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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,125	11/19/2003	Paul E. Jacobs	040101	9099
23596 7590 12/12/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
DINH, DUC Q				
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
12/12/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/718,125

Applicant(s)

JACOBS ET AL.

Examiner

DUC Q. DINH

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-11, 13, 14 and 26-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 13-14, 26-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 10/03/08.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2008 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "deployable" in claims 1, 8, 11, 13, 14, is a relative term which renders the claim indefinite. It is unclear whether the keyboard assembly can be deployable is deployable or not deployable in the multiple directions as claimed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-6 and 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Jellicoe (U.S Patent No. 7,107,018).

In reference to claim 1, Jellicoe discloses in Figs. 2 and 3 an apparatus comprising;

a display (22) for presenting information;

and a keyboard assembly(14 and 16) connected through a sliding connection to the housing, the keyboard assembly deployable in first direction and second directions.

wherein the deployment in the first direction present a firsts key arrangement and deployment in the second direction presents a second key arrangement different from the first key arrangement as shown in Figs. 2 and 3.

an overlap area (front housing) defined between the display and the keyboard assembly, wherein the overlap area is common in both of first direction and second direction; and

electrical connections between the display and the first key arrangement and between the display and the second key arrangement, wherein the electrical connections are disposed in the overlap area. (in order to display text (34) inputted by keypads 14 and 16, the front housing (overlap area) with display must have electrical connection with keypads 14 and 16; see col. 2, lines 18-40)

In reference to claim 3, Jellicoe discloses first keyboard deployment direction presents a QWERTY key arrangement and the second keyboard deployment direction presents a phone style key arrangement (col. 3, lines 21-30).

In reference to claims 4-5, Jellicoe discloses the device is operable as a PDA and a phone, a wireless environment (col. 2, lines 46-48).

In reference to claim 6, Jellicoe discloses the sliding connection comprising a track a track and carrier type of connection (see Fig. 1-3)

In reference to claim 38, Jellicoe discloses the pairs of tracks connected the first connected to a first of the keypad 14 and the second pairs of tracks connected for the second keypad 16 as shown in Figs. 2-3 and col. 4, lines 31.

In reference to claim 39, Jellicoe discloses the aspect ratio for portrait and landscape modes based on the disposed keypad (col. 3, lines 6-20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-11, 13-14, 26-37 and 40-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jellicoe in view of Lenchik et al. (U.S Patent No. 6, 658,272), hereinafter Lenchik.

In reference to claim 8, Jellicoe discloses a method for presenting information on a display to a user of a device, the device having a keyboard deployable through a sliding connection, the keyboard deployable in multiple directions, the method comprising:

detecting a direction in which the keyboard assembly is deployed, wherein the respective direction corresponding to one of the first operational mode or second operation mode (PDA mode or phone mode)

and orienting information presented on the display with reference to a direction of deployment of the keyboard assembly, thereby defining an operating one of the first operational mode and second operational mode (col. 3, lines 5-20).

receiving a communication corresponding to a non-operating one of the first operational mode and the second operational mode; (col. 2, lines 6-16)

generating a prompt to switch from the operating one to the non-operating one of the first operational mode and the second operational mode in response to the received communication; furthermore, Jellicoe discloses the communication device change the orientation display in the same orientation of the deployment of the first and second keypads (col. 3, lines 6-10) according to the first and second modes.

Accordingly, Jellicoe discloses everything except the step of generating a prompt to switch from one the operating to non-operating one of the first operational mode and the second operational mode; detecting a change in the direction in which the keyboard assembly is deployed corresponding to the switch from the operating one to the non-operating one of the first operational mode and the second operational mode; and changing the orientation of the information presented on the display with reference to the change in the direction in which the keyboard assembly is deployed.

Lenchik discloses a portable device (100) that can detect a relative position of the device and selecting an operation mode of the device based on the relative position

(see abstract) and notifies the user that a non-selected services is waiting to be received, i.e. generating a prompt to switch from one the operating to no-operating to the first operational mode and the second operational mode, the user may therefore reposition the device to self configured and display information is reoriented according to the operation. (col. 4, lines 53-64)

It would have been obvious for one of ordinary skill in the art at the time of the invention to learn the teaching of generating the prompt to switch from one operating mode to a non-operating mode as taught by Lenchik to notifies the user an incoming message waiting to be received when the device is used in the other operation mode.

In reference to claims 9-10, Jellicoe discloses the orienting information presented on the display with reference to input by the user, i.e. when the user use the keyboard to input information to the device, or an input from an application resident on the device (col. 3, lines 6-20)

In reference to claim 7, Lenchik discloses the touch screen display that is capable of reconfiguring and reorienting the input regions.

In reference to claim 11, Jellicoe discloses an apparatus comprising:

a display for presenting information in a first orientation or a second orientation;

a keyboard assembly deployable in multiple directions. (see rejection of claim

1)

wherein the keyboard assembly provides a first set of key arrangement when deployed in a first direction, and provides a second set of key arrangement when deployed in a second direction, wherein the first set of key arrangement corresponds to

a first operational mode and wherein the second set of key arrangement corresponds to a second operational mode; (see Figs. 2 and 3 and rejection of claims 1 and 8)

Jellicoe does not disclose wherein the apparatus is operable to generate a prompt to switch between an operating one and a non-operating one of the first operational mode and the second operational mode in response to a received communication corresponding to the non-operating one of the first operational mode and the second operational mode.

Lenchik discloses a portable device (100) that can detect a relative position of the device and selecting an operation mode of the device based on the relative position (see abstract) and notifies the user that a non-selected services is waiting to be received, i.e. generating a prompt to switch from one the operating to non-operating to the first operational mode and the second operational mode, the user may therefore reposition the device to self configured and display information is reoriented according to the operation. (col. 4, lines 53-64)

It would have been obvious for one of ordinary skill in the art at the time of the invention to learn the teaching of generating the prompt to switch from one operating mode to a non-operating mode as taught by Lenchik to notifies the user an incoming message waiting to be received when the device is used in the other operation mode.

Claims 13 and 14 are apparatus claims of claim 8, and therefore is rejected as the same reason as set forth for claim 8.

In reference to claims 26-35, Jellicoe does not disclose the Hall effect sensor and magnets to determine the deployment of the keypad 14 and 16.

However, the use of Hall effect sensor and magnet is used to determine the position of elements of a portable device is well-known in the art. In the same field of endeavor, Lenchik discloses the position sensor for detecting relative positions of the device to selecting operational modes of the device based on the detected relative positions comprises a magnet 1373 and a Hall Effect sensor 1377. The magnet 1373 is preferably affixed to an end of the connector element 903, and the Hall Effect sensor 1377 is affixed to or embedded in a fixed element 909. The magnet 1373 may be comprised of multiple magnetic north and south poles, and may be comprised of multiple magnets or magnetic poles of different strengths and orientations. The Hall Effect sensor 1377 generates an electrical signal when in a magnetic field. The corresponding position sensor circuit board 1035 may use this electrical signal to determine a relative position. t

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the position sensor of Lenchik which includes magnets and Hall effect sensor in the system Jellicoe to detect the arrangement position of the keyboard 14 and 16 to determine the position of keypads 14 and 16 and activate the operational mode of the device based on the detected position.

In reference to claim 36, Lenchik discloses the flexible circuit material connecting between the first and second elements of the device in Figs. 9-10.

In reference to claim 37, refer to the rejection of claim 8 for the limitation generating the prompt to switch between modes.

In reference to claims 40, 42, 44, 46 refer to the rejection of claim 1 for the overlap area and electrical connecting as discussed in claim 1.

In reference to claims 41, 43, 45, 47 refer to the rejection as discussed in claim 39 for the aspect ratios.

Response to Arguments

7. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection as elaborated in this Office Action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Duc Q Dinh/

Primary Examiner, Art Unit 2629